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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,781	12/28/2001	Siavash Fallahi	1875.1270001/JTH/BAM	6416

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STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
1100 NEW YORK AVE., N.W.  
WASHINGTON, DC 20005

EXAMINER
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BRINEY III, WALTER F

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/028,781	Applicant(s) FALLAHI ET AL.	
	Examiner Walter F. Briney III	Art Unit 2615	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-33 is/are allowed.
- 6) ☒ Claim(s) 1-3, 11, 12, 14 and 34-36 is/are rejected.
- 7) ☒ Claim(s) 4-10 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **7DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05 June 2006 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-3, 11, 12, 14, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormack et al. (US Patent 6,535,983) in view of Campardo et al. (US Patent 5,886,925).**

**Claim 1** is limited to "a communications device." The device claimed has been shown to be anticipated by McCormack apropos the Final Rejection filed 04 January 2006. By the instant amendment to claim 1, however, it is true that the diode 72 fails to act as the "relay" claimed. Specifically, prior art diodes used as relays typically require

bias voltages in excess of zero volts to be enabled. However, this deficiency is overcome by an obvious modification.

In particular, as noted in the Final Rejection filed 04 January 2006 of claim 2, it would have been obvious to implement McCormack's diodes 72 and 74 in the manner as taught by Campardo: with native FET devices. Native devices are inherently capable of conducting current with zero bias because their threshold voltage is approximately zero volts. In other words, "said relay 72 is closed when no power is applied to said relay." Therefore, McCormack in view of Campardo makes obvious all limitations of the claim.

**Claims 2 and 3** are rejected for the same reasons presented above apropos the rejection of claim 1 as well as those reasons set forth in the Final Rejection filed 04 January 2006.

**Claims 11, 12 and 14** are rejected for the same reasons presented above apropos the rejection of claim 1 as well as those reasons set forth in the Final Rejection filed 04 January 2006.

**Claims 34-36** are rejected for the same reasons presented above apropos the rejection of claim 1 as well as those reasons set forth in the Final Rejection filed 04 January 2006.

***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter:

**2. Claims 15-33 are allowed.**

**Claim 27** is limited to “a communications device.” The applicant’s current amendments to claim 27 are not disclosed by the prior art. In particular, the impedance of switched termination 60 is not constant with respect to either time or frequency. That is, the impedance changes with a time-varying input voltage, and varies based on the frequency of the input voltage. Both the former and the later impedance changes are affected by the presence of capacitor 70 in the control loop. Thus, claim 27 is allowable over the cited prior art.

**Claims 28-33** are limited in part to “the communications device of claim 27,” and thus, are allowable over the cited prior art for at least the same reasons.

**Claims 15-26** are allowable over the cited prior art for the reasons set forth in the Final Rejection filed 04 January 2006.

**3. Claims 4-10 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

**Claims 4-10 and 13** are allowable over the cited prior art for the reasons set forth in the Final Rejection filed 04 January 2006.

***Response to Arguments***

Applicant’s arguments filed 05 June 2006 have been fully considered but they are not persuasive.

**While claims 1-3, 11, 12, 14 and 34-36** are rejected under new grounds, applicant's arguments regarding the rejection of claim 2 are germane to the new grounds, and hence are treated below.

In particular, on page 15, line 14, through page 16, line 15, of the current response the applicant alleges that combining Campardo with McCormack actually teaches away from the base invention of McCormack. These arguments were shown to be untenable in the Advisory Action filed 17 May 2006. As the applicant has neither provided a new line of thought nor persuasive arguments regarding the Advisory Action, the same arguments are maintained.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F. Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**

WFB